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## CLAIMS

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- 1. A composition in form of solution for use in an aerosol inhaler, the composition comprising an active material, a propellant containing a hydrofluoroalkane (HFA), a cosolvent, optionally a low volatility component characterized in that the propellant consists of a mixture of HFA 227 and HFA 134a.
- 2. A composition according to claim 1, wherein the ratio of HFA 227/HFA 134a ranges from 10:90 to 90:10.
- 3. A composition according to claim 1 or 2, wherein the low volatility component has a vapour pressure at 25°C lower than 0.1 kPa.
- 4. A composition according to claim 3, wherein the low volatility component has a vapour pressure at 25°C lower than 0.05 kPa.
  - 5. A composition according to any preceding claim, wherein the cosolvent has a vapour pressure at 25°C lower than 3 kPa.
- 20 6. A composition according to any preceding claim, wherein the cosolvent has a vapour pressure at 25°C lower than 5 kPa.
  - 7. A composition according to any preceding claim, wherein the cosolvent is an alcohol.
- 8. A composition according to any preceding claim, wherein the low volatility component includes a glycol, oleic acid or isopropyl myristate.
  - 9. A composition according to any preceding claim,

wherein the composition includes not more than 20% by weight of the low volatility component.

- 10. A composition according to any preceding claim, wherein the composition includes at least 0.2% by weight of the low volatility component.
- 11. A composition according to any preceding claim, the composition being such that, on actuation of the aerosol inhaler in use, the MMAD of the aerosol particles is not less than 2  $\mu m$ .
- 10 12. An aerosol inhaler containing a solution composition comprising an active material, a propellant containing one or more hydrofluoroalkane, a cosolvent and optionally a low volatility component wherein the particle MMAD is greater than 2  $\mu$ m and the fine particle dose (< 4.7  $\mu$ m) is > 30%.
  - 13. An aerosol inhaler according to claim 12 wherein the particle MMAD is greater than 2  $\mu m$  and the fine particle dose (< 4.7  $\mu m$ ) is > 40%.
- 14. An aerosol inhaler according to claims 12 and 13 wherein the particle MMAD is greater than 2  $\mu m$  and the fine particle dose (< 4.7  $\mu m$ ) is > 50%.

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- 15. An aerosol inhaler according to claims 12 to 14 having a chamber volume ranging from 25 to 50  $\mu$ l yielding an increase of FPD compared to inhalers having chamber volumes larger than 50  $\mu$ l.
- 16. An aerosol inhaler according to claims 12 to 15 containing the compositions of claims 1-11.
- 17. An aerosol inhaler according to claims 12 to 16

having part or all of the internal surfaces consisting of stainless steel, anodised aluminium or lined with an inert organic coating.

18. A delivery system for the administration of drugs to the lung consisting of aerosol drug solution in a mixture of 134a and 227 HFA propellants, a cosolvent and optionally a low volatility component, in an aerosol inhaler having a chamber volume ranging from 25 to  $\mu$ l.

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